

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Tae-Yoon Kim et al.

Application No.: 10/589,102

Filed: October 06, 2006

For THERAPEUTIC USE OF CPG  
OLIGODEOXYNUCLEOTIDE FOR SKIN  
DISEASE

} Group Art Unit: 1632

} Examiner: NOBLE, MARCIA  
STEPHENS

} Confirmation No.: 5838

DECLARATION OF DR. Tae-Yoon Kim

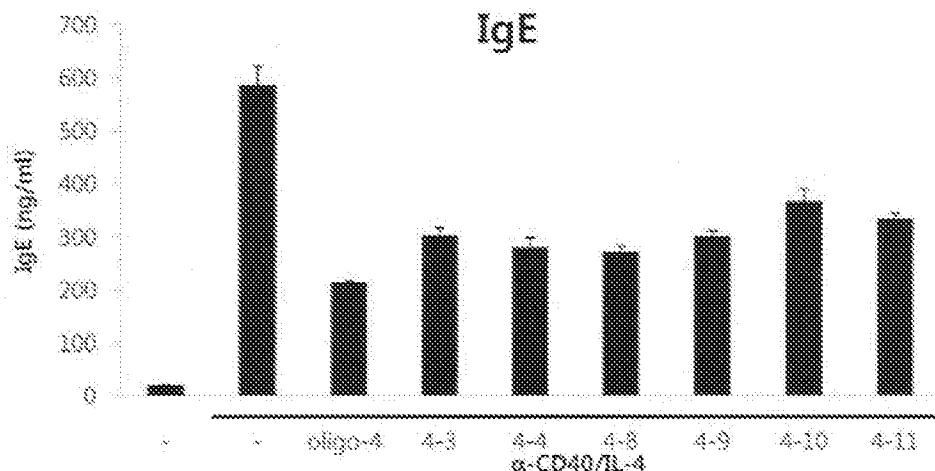
Sir:

1. I, Dr. Tae-Yoon Kim, declare the following:
2. I am a citizen of the Republic of Korea, and have the following mailing address: Asia Seonsoochon Apt. #8-702, Jamsil-dong, Songpa-gu, Seoul 136-220, Republic of Korea;
3. I graduated from the Catholic University of Korea, Medical College with M.D. degree in 1980 and Ph.D. degree in 1989;
4. I am a professor of the Department of Dermatology, Catholic University of Korea;
5. I have read and am familiar with the above-identified United States patent application filed April 29, 2006, and I am submitting this Declaration in support of that application;
6. I have performed and/or supervised the experiments reported below:

## &lt; Analysis of Immunoglobulin E (IgE) production in B cells &gt;

To evaluate inhibitory effect on IgE synthesis in B cells, B cells were stimulated with CD40 (CD154) in present IL-4 for 5 days. 1 μM CpG-ODNs were used for all experiments and ELISA was done with culture supernatants.

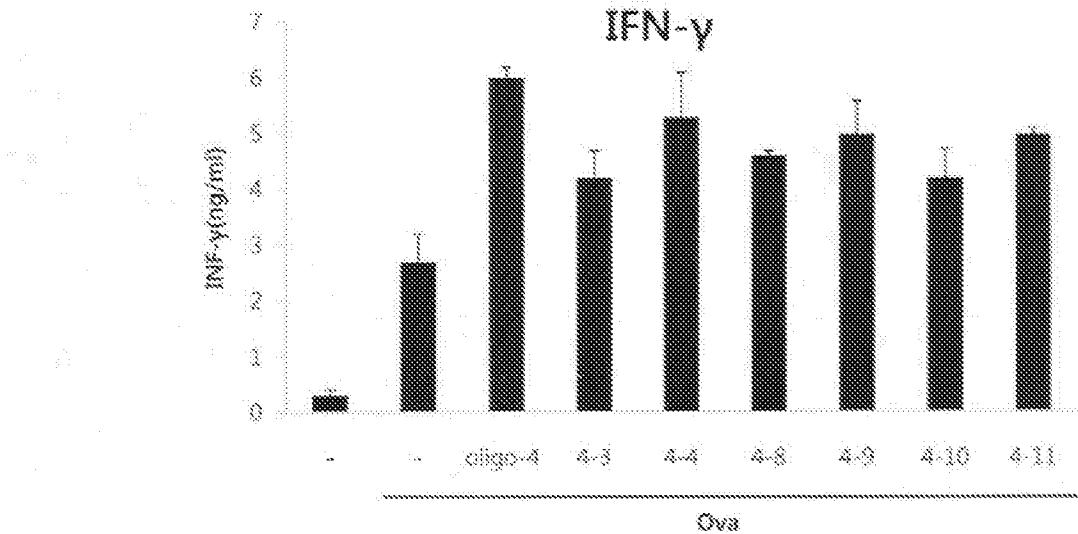
As a result, IgE production was reduced by CpG-ODNs treatment.



## &lt; Analysis of Interferon-gamma (IFN-γ) production in splenocyte &gt;

We investigated effect of CpG-ODNs on IFN-γ production. For analysis of IFN-γ production, Spleen cells were obtained from DO11.10 mice, which were stimulated with Ovalbumin.

The Spleen cells were incubated with or without CpG-ODNs. ELISA assay targeting (IFN-γ) was performed 24 h after stimulation.



7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: Nov. 1, 2010 By:   
Tae-Yoon Kim